

WHAT IS CLAIMED IS:

1. A heart implant device for associating with a heart of a living body, the device comprising:
  - (a) a housing for securely associating with heart tissue, said housing encompassing a space, said housing including a conductive coil, and
  - (b) a ferromagnetic element disposed within said space, said element for moving relative to said coil so as to produce electrical energy within the living body.
2. The implant device of claim 1, wherein said housing is for securely juxtaposing with said heart tissue.
3. The implant device of claim 1, wherein said housing is for attaching directly to said heart tissue.
4. The heart implant device of claim 3, wherein said housing is for attaching directly to said heart tissue by a fixture selected from the group of fixtures including a staple, a suture, and a tie.
5. The heart implant device of claim 1, wherein said housing is for disposing generally around a circumference of the heart.

6. The heart implant device of claim 1, wherein said housing is for enveloping the heart by at least 180 degrees.
7. The heart implant device of claim 6, wherein said housing is a ring for substantially encompassing said heart.
8. The heart implant device of claim 1, wherein said housing is shaped to spiral around the heart.
9. The heart implant device of claim 1, wherein said housing is for securely associating with an epicardium.
10. The heart implant device of claim 1, wherein said housing is for securely associating within a pericardium.
11. The heart implant device of claim 7, wherein a first end of said housing is disposed within a second end of said housing.
12. The heart implant device of claim 11, wherein said first end includes said ferromagnetic element.

13. The heart implant device of claim 1, wherein said housing is attached to said heart tissue near a first end of said housing, such that a second end of said housing has at least one degree of freedom to move in response to movement of said heart tissue.

14. The heart implant device of claim 1, wherein said housing includes a plurality of compartments, each compartment of said compartments including said ferromagnetic element.

15. The heart implant device of claim 14, wherein each of said compartments further includes a spring mechanism for returning said ferromagnetic element from a wall of said compartment.

16. The heart implant device of claim 1, wherein said housing includes a flexible joint for absorbing stress due to a movement of said heart tissue.

17. The heart implant device of claim 16, wherein said flexible joint includes a bellowed section.

18. The heart implant device of claim 1, wherein said conductive coil is disposed externally to said housing.

19. The heart implant device of claim 1, wherein said conductive coil is disposed within said housing.

20. The heart implant device of claim 1, wherein said ferromagnetic element is a shaft.

21. The heart implant device of claim 1, wherein said ferromagnetic element is a ball.

22. The heart implant device of claim 1, wherein said housing further includes a biocompatible external layer for contacting said heart tissue.

23. The heart implant device of claim 1, wherein said housing further includes a biocompatible layer disposed to physically and electrically isolate said heart tissue from said coil.

24. The heart implant device of claim 1, wherein an external wall of said housing flares out so as to provide increased surface area for improving a distribution of pressure applied to said heart tissue.

25. The heart implant device of claim 1, wherein an external wall of said housing flares out so as to provide increased surface area for securing said housing to said heart tissue.

26. The heart implant device of claim 1, wherein a first end of said housing is disposed externally to the heart.

27. The heart implant device of claim 26, wherein said first end includes a compartment, said compartment including said ferromagnetic element.

28. The heart implant device of claim 1, further comprising:

(c) a pacemaking element for stimulating contractions of muscle tissue in the heart.

29. The heart implant device of claim 28, wherein the device is designed and configured for anchoring between a myocardium and epicardium of the heart.

30. The heart implant device of claim 28, wherein the device is designed and configured for anchoring within a pericardium encompassing the heart.

31. The heart implant device of claim 28, wherein the device is designed and configured for anchoring within a coronary sinus.

32. The heart implant device of claim 1, wherein the device is designed and configured for anchoring between a myocardium and epicardium of the heart.

33. The heart implant device of claim 1, wherein the device is designed and configured for anchoring within a pericardium encompassing the heart.

34. The heart implant device of claim 1, wherein the device is designed and configured for anchoring within a coronary sinus.

35. The heart implant device of claim 1, wherein disposed within said space is a spring mechanism for returning said ferromagnetic element from a wall of said housing.

36. A method for associating a heart implant device with a heart of a living body, the method comprising the steps of:

- (a) providing a device including:
  - (i) a housing for securely associating with heart tissue, said housing encompassing a space, said housing including a conductive coil, and
  - (ii) a ferromagnetic element disposed within said space, said element for moving relative to said coil so as to produce electrical energy within the living body, and
- (b) attaching the device to said heart tissue.

37. A heart implant device for associating with a heart of a living body, the device comprising:

- (a) a housing for securely associating with heart tissue of the heart;
- (b) a conductive coil, and
- (c) a ferromagnetic element,

wherein one of said coil and said ferromagnetic element is securely associated with said housing, and wherein said coil and said ferromagnetic element are designed and configured for moving relative to one another in response to a movement of said heart tissue, so as to produce electrical energy within the living body.